

Environmental Assessment
for the
Relocation of Eielson's Main Gate
Eielson Air Force Base, Alaska

354th Fighter Wing
April 2004

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**FINDING OF NO SIGNIFICANT IMPACT (FONSI)
for the
RELOCATION OF EIELSON'S MAIN GATE**

Introduction

Eielson Air Force Base's (Eielson) main gate is located in the end-of-runway clear zone creating significant hazard for gate personnel. In addition, the existing gate facilities and their configuration cause significant traffic movement delays when heightened security is implemented.

Description of the Proposed Action

The proposed action would result in the construction of a new gate complex along the Old Richardson Highway approximately 300 feet north of the existing gate. This gate complex would include a visitors center with expanded parking area for visitor parking and processing, three vehicle traffic lanes for checking identification, a vehicle inspection lane, an offender's parking lot, and a drop arm gate.

Alternatives to the Proposed Action

One alternative to the proposed action was identified. This alternative would result in the rebuilding of the existing gate at its current location to incorporate needed design changes that would facilitate traffic movement on and off base.

No Action Alternative

This alternative would result in no improvements to Eielson's main gate facilities.

Environmental Impacts of the Proposed Action**Wetlands and Floodplains**

There are no wetlands in the project area and none would be impacted. The project area is not in the 100-year floodplain.

Biological Resources

Impacts to biological resources from the Proposed Project would be minimal. Approximately 0.5 acres of woodlands would be lost by the project. These woodlands are habitat to a few birds and some small mammals. The wildlife currently using the area would be displaced to adjoining similar habitat with little or no population impacts.

Threatened or Endangered Species

There are no threatened or endangered species in the project area. The project area is not suitable habitat for any of the threatened or endangered species occurring in the Alaskan interior.

Historical or Cultural Resources

Most archeological sites on Eielson lands have been identified and mapped. The Proposed Project is not associated with any known sites. In the event that historic or cultural sites are discovered during project construction, activities will be halted and a professional archeologist will evaluate the find.

Air Quality

The proposed actions will have minor air quality impacts during construction due to fugitive dust and machinery exhaust. Such impacts will be highly localized and temporary in nature.

Mitigation

No special conditions (mitigation) other than standard best management practices that are already incorporated into the project design are required by any federal or state agency for impacts that may result from this project.

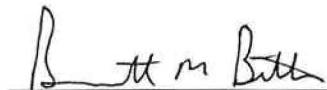
Public Comment

No public comment was received from the public noticing of the draft EA/FONSI for this proposed activity.

Findings

Pursuant to the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality (CEQ) implementing regulations for NEPA (40 CFR Part 1500-1508), and Air Force Instruction (AFI) 32-7061, *Environmental Impact Analysis Process* (32 CFR Part 989), the Air Force has conducted an EA for the relocation of Eielson's main gate. This FONSI has been developed pursuant to information provided in the accompanying EA.

Finding Of No Significant Impact: Based on this environmental assessment, which was conducted in accordance with the requirements of NEPA, CEQ, and Air Force Instructions, I conclude relocation of the main gate to its proposed location will not result in significant impacts to the environment. I also find that the preparation of an environmental impact statement is not warranted.



BENNETT M. BITLER
Colonel, USAF
Vice Commander



DATE

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1.0 Purpose and Need for the Action

Section 1.0 provides a description of the purpose and need for the proposed action and its alternatives.

1.1 Background and Objectives for the Proposed Action and Alternatives

1.1.1 The host unit at Eielson Air Force Base (Eielson), the 354th Fighter Wing, operates F-16 Fighting Falcon and OA-10 Thunderbolt aircraft. The 168th Air Refueling Wing (Air National Guard) is also based at Eielson and currently flies KC-135 aircraft. In addition, since Alaska ranges are the closest US-controlled tactical flying training areas available to Pacific Air Command Air Forces (PACAF) and US allies in the Pacific, large numbers of aircraft are frequently deployed to Eielson to participate in joint/combined training and Major Flying Exercises (MFE).

1.1.2 Eielson is typical of most Air Force bases in that a significant amount of vehicle traffic enters and leaves the base on a daily basis. This traffic includes a large permanent civilian work force, temporary contractor employees, and military dependents that work off base. All of this traffic moves through Hursey Gate, the only gate available for routine traffic movement off base.

1.1.3 Hursey gate is located at the north end of the flight line and is positioned in the end-of-runway clear zone (see **Figure 2**). This results in a significant flight hazard for personnel that work at the gate.

1.1.4 Eielson has been planning a new main gate complex since 1994. A delay in implementing this project occurred when the base found out about plans by the Alaska State Department of Transportation and Public Facilities (ADOT & PF) to build an overpass on the Richardson Highway within 500 feet of Eielson's main gate. Before a new gate design could be finalized, changes to the Richardson Highway that would occur with the new overpass had to be factored into the new gate design.

1.1.5 In addition to moving the gate out of the end-of-runway clear zone, several new improvements to gate related facilities will be built that will address post September 11, 2001 security requirements.

1.2 Location of the Proposed Action

1.2.1 Eielson is located in the Tanana River Valley on a low, relatively flat, floodplain terrace that is approximately 2 miles north of the active river channel. Other communities near Eielson include Moose Creek to the north and Salcha to the south.

1.2.2 Base lands include 19,790 contiguous acres bounded on the west by the Richardson Highway and on the north and east by Army lands (Yukon Training Area). To the south, the community of Salcha borders Eielson. The developed portion of Eielson is primarily an area filled by gravel to elevate potential building sites above the 100-year floodplain of nearby watersheds. In addition, more than 90 percent of the lands that constitute Eielson were at one time wetlands. Of the remaining undeveloped portions of the base, 70 percent are wetlands. As a consequence, land planning and utilization of Eielson lands becomes very difficult if one is to entirely avoid siting facilities in wetlands and floodplains.

REGIONAL AND BASE LOCATION MAPS

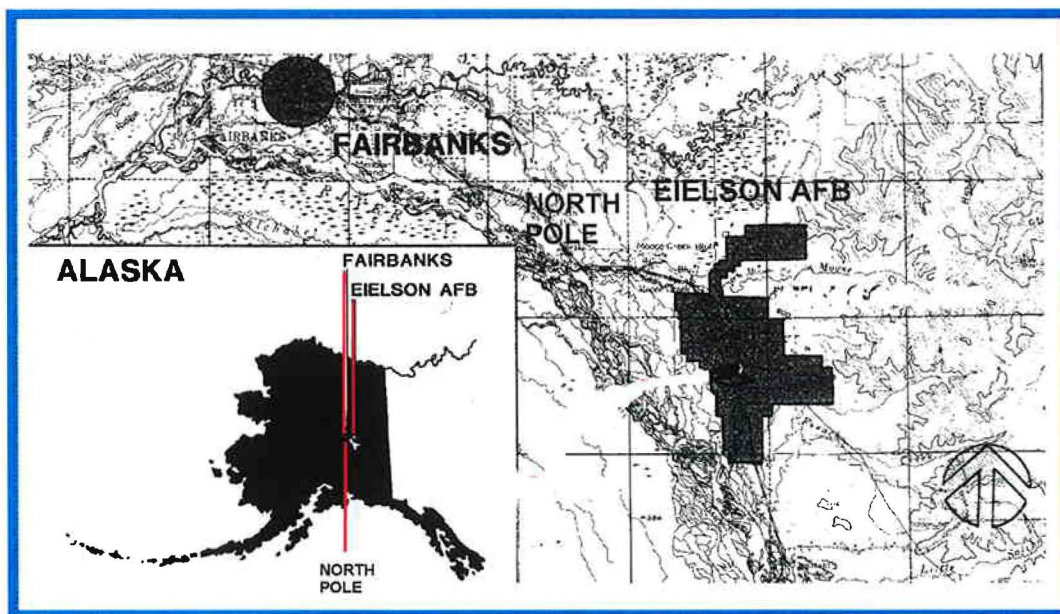


Figure 1-1 Base Location Map

1.3 Proposed Action

The proposed action would result in the construction of a new gate complex along the Old Richardson Highway approximately 300 feet north of the existing gate (see **Figure 2**). This gate complex would include the following:

- Visitors center with expanded parking area for parking for visitor processing.
- Three vehicle traffic lanes for checking identification. Two lanes for standard sized vehicles and one large vehicle lane.
- Vehicle inspection lane, offender's parking lot, and a drop arm gate.

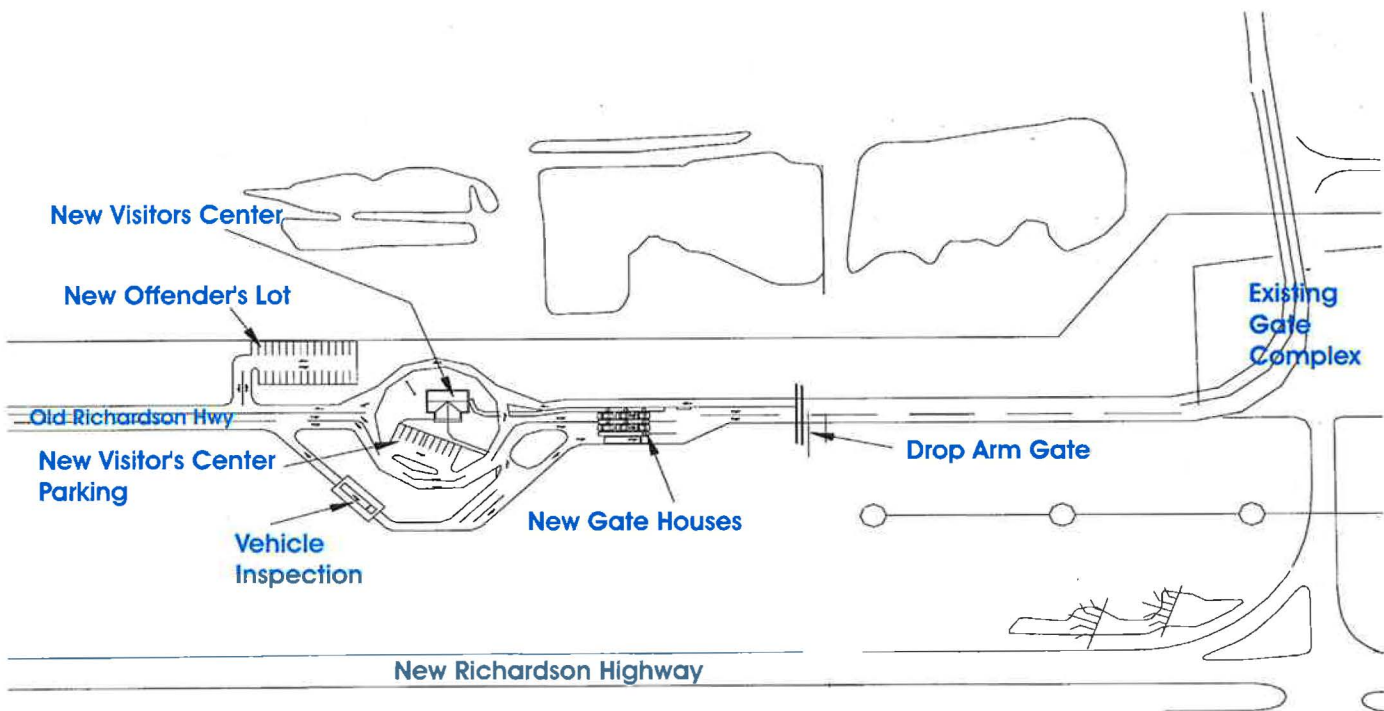


Figure 2 - Proposed Action

1.4 Alternatives to the Proposed Action

1.4.1 Alternative 1: An alternative was proposed that would result in improvements to the existing gate and associated facilities. These improvements would include constructing permanent guardhouses, a larger visitors center with expanded parking and a new drop arm gate.

1.5 No Action Alternative: This alternative would result in the continued use of the existing gate facility in its current configuration.

1.6 Decision to be Made

1.6.1 As required by 32 CFR Part 989, the *Environmental Impact Analysis Process* will be used to determine the environmental consequences of the proposed relocation of Eielson's gate. This EA is intended to satisfy these requirements. The proposed action and all alternatives listed in Sections 1.4 will be addressed in detail in Chapter 2.0 of this document. A description of the resources associated with the areas affected by all alternatives will be provided in Chapter 3.0 and the impacts that could result from each one are discussed in Chapter 4.0.

1.6.2 Based on the evaluation of impacts in the EA, a Finding Of No Significant Impact (FONSI) will be published if there is a finding of no significant environmental impacts for the proposed action. If it is determined that the proposed action will have significant

environmental impacts, other alternatives will be considered for which impacts may not reach the threshold of significance.

1.6.3 The EA, a draft FONSI (if applicable), and all other appropriate planning documents will be provided to the Eielson Vice Commander, the decision maker, for review and consideration. If, based on a review by the decision maker of all pertinent information, a FONSI is proposed, a notice of intent (NOI) will be published in accordance with 40 CFR 1506.6. All interested parties will have 15 days to comment on the decision to the Air Force. If, at the end of the 15-day public comment period, no substantive comments are received, the decision maker will sign the FONSI.

1.7 Project Scoping/Significant Issues

This section provides a summary of major issues raised during the scoping process that were considered significant enough to be addressed in the EA. The scoping process typically involves a meeting of potentially interested parties. These may include state and federal regulatory agencies that have oversight authority, as well as base groups that have involvement in traffic management and base security. For this project scoping process all potentially interested parties were contacted. A list of attendees is provided in Section 5 of this document. The following issues were identified during the scoping process:

Traffic is extremely congested at the existing gate during elevated security periods. The current gate facility cannot handle traffic in the necessary volume to avoid severe traffic congestion. Only two check lanes are available for this purpose and three are needed. The new gate configuration should have at least three lanes.

Close coordination is needed with ADOT & PF to ensure that the new gate design will be properly incorporated into the new highway overpass project. A new overpass intended to deal with traffic congestion entering Eielson is scheduled by ADOT & PF for the 2005 construction season. Meetings have already taken place that discussed related issues.

Any project alternatives that would require relocation of the Richardson Highway would be very expensive. A second alternative to the proposed action that was considered, but later rejected, would have required that the Richardson Highway be moved 300 feet west of its current alignment. The cost of relocating a four-lane highway for approximately 0.5 mile would be 1.5 million dollars. For this reason the second alternative was dropped from further consideration.

1.8 Federal, State, and Local Permits Needed for Project Implementation. No local, state, or federal permits would be needed for the proposed project.

2.0 Description of the Proposed Action and Alternatives

Chapter 2.0 provides a description of alternatives considered for the purpose and need described in Chapter 1.0. The proposed action, one action alternative, and a no action alternative are addressed.

2.1 Proposed Action – Relocate the Main Gate to the Old Richardson Highway

2.1.1 The proposed action would result in the construction of a new Main Gate complex on the Old Richardson Highway. The new complex would include the following components:

- The Old Richardson highway will be widened to three lanes, two going on the base and one going off the base. The three lanes will be split into a circle with the visitor's center in the middle of the circle (see **Figure 2-1**).
- Visitors Center - A 1,415 square foot visitors center will be constructed that will have increased parking area for vehicles requiring passes.
- A vehicle inspection facility will be built on the west side of the Old Richardson. This facility will have entry and exit lanes that connect to the Old Richardson.
- A new offender's parking for drivers that have lost base driving privileges will be built along the Old Richardson Highway just before the entrance to the base.
- A new gatehouse complex will be constructed. This complex will include two vehicle lanes for standard sized vehicles and one lane for large vehicles. The two standard vehicle lanes will have three booths and the large vehicle lane just one (see **Figure 2-2**).
- A new drop arm gate will be constructed on the base side of the gatehouses that will provide a barrier to vehicles when needed. New security fencing will be constructed.

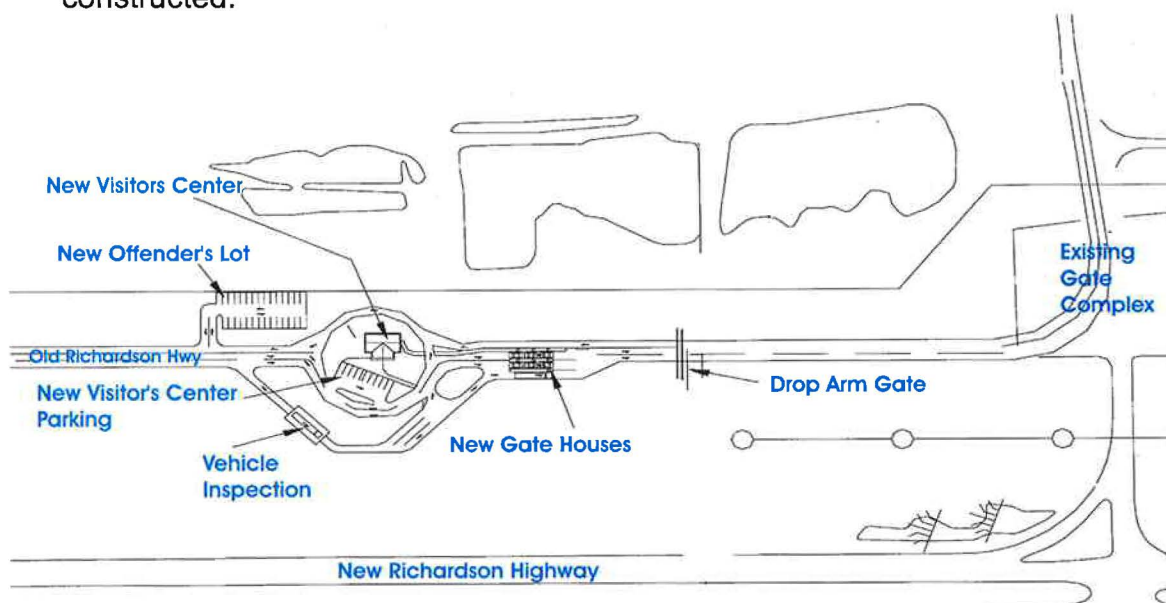


Figure 2-1 - Proposed Project Layout

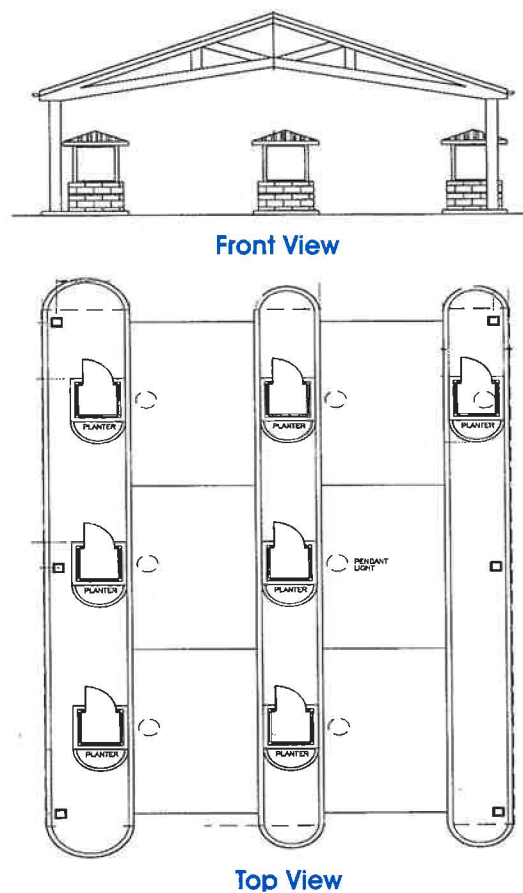


Figure 2-2 - Proposed Project Gate House Design

2.2 Alternative 1

2.2.1 This alternative would result in extensive modification to the existing gate. The gate would be rebuilt to accommodate most of the designs described in the proposed action. The main difference would be in the room available for each facility. Although the gate would be moved approximately 150 feet west of its current position to get it, as much as possible, out of the runway clear zone, there would not be enough room to build the complete new gate design.

2.2.2 Although this alternative would give some relief to the flight line safety concerns that the existing gate creates, it would still be an issue. Portions of the new gate complex would still be in the runway clear zone.

2.3 No Action Alternative

This alternative would result in the continued use of the existing gate complex. This would result in operational deficiencies with respect to security and force protection requirements that the existing gate does not meet. In addition, the safety concerns due to its location in the runway clear zone would still exist.

3.0 Affected Environment

This section describes relevant resource components of the existing environment that might be impacted by the proposed project and its alternatives. Only environmental components relevant to the issues and objectives of this EA are described.

3.1 Physical Environment

Eielson encompasses approximately 19,790 acres, is isolated from major urban areas, and is situated approximately 23 miles southeast of Fairbanks, Alaska. The portion of Eielson that contains the areas associated with the Proposed Action and Alternatives 1 lie on the abandoned floodplain of the Tanana River, with elevations ranging from 525 to 550 feet above mean sea level (MSL). The surface of the floodplain is relatively smooth and slopes gently downward to the northwest at a gradient of about 6 feet per mile.

3.1.1 Soils

3.1.1.1 Soils in the Tanana River Valley consist of unconsolidated silty sands and gravels, organic and sandy silts, and clays. Floodplain soils nearest the active channels are sandy with a thin silt loam layer on the surface. On higher terraces, the soils become predominately silt from the Salchaket series. Along older river terraces, silt loam soils, which contain significant organic components, often dominate. These soils tend to be cold and wet and are generally underlain by permafrost. Approximately two-thirds of Eielson is covered with soils containing discontinuous permafrost. This preponderance of permafrost soils contributes to the large percentage of vegetated wetlands occurring on undeveloped base lands.

3.1.1.2 The developed portion of the base has mainly been constructed by filling above the estimated 100-year flood elevation with gravel from local borrow pits. Most of these areas, prior to their being filled, were functioning wetlands.

3.1.1.3 Soils in the immediate vicinity of Garrison Slough and Transmitter Road are a mixture of natural and disturbed or imported soils. Soils in the vicinity of the existing roadbed are alluvial gravels. Soils immediately adjacent to the stream are Piledriver complex, which are generally poorly drained and not suitable for foundation purposes. Soils associated with Garrison Slough's stream basin are Goldstream silt loam which is very poorly drained.

3.1.2 Groundwater

Eielson is located over a shallow unconfined aquifer. The aquifer is approximately 250 feet thick, extends to bedrock, and has a regional gradient of about 5 feet per mile flowing to the north-northwest. The water table varies from the surface in adjacent wetlands, to 10 feet below ground level in developed areas. The base uses the local

aquifer for its drinking water and monitors groundwater quality in a number of locations as part of its Installation Restoration Program (IRP). Localized contamination of the aquifer has been identified in the industrial area of the base, but the overall quality of groundwater at Eielson is excellent.

3.1.3 Surface Water

3.1.3.1 Aquatic bodies on Eielson include streams, wetlands, and lakes. There are approximately 28 miles of streams; 10,133 acres of wetlands; 12 lakes (Lilly Lake is natural and the remaining 11 are man-made) and 80 ponds (10 naturally-occurring and 70 man-made) totaling 560 acres; and 6,770 acres of floodplains on the main base. The man-made lakes and ponds were created during the excavation of gravel deposits for use as fill material for construction projects on base. Surface drainage on Eielson is generally in a north-northwest direction and parallel to the Tanana River. Five streams flow through the base and discharge into the Tanana River via Piledriver Slough.

3.1.3.2 Approximately 51 percent, or 10,133 acres, of Eielson is classified as wetlands, with 9,391 acres being vegetated wetlands and the remainder being lakes, ponds, and streams. Wetlands and low gradient alluvial streams comprise most of the surface water resources on Eielson, with wetlands dominating the low-lying areas within, and surrounding, the installation. Most wetland areas were created as a result of surface waters becoming perched in the thawed (active) layer over the permanently frozen subsurface (permafrost). Flood periods tend to occur during spring snowmelt and during the middle to late summer, when heavy rains or warm air quickly brings glacier fed mountain streams to flood capacity. Several lakes and extensive wetlands surround the airfield in the cantonment area. Among these are Bear, Polaris, Moose, Hidden, Pike, Rainbow, Scout, Grayling, and Tar Kettle lakes. Creeks that can be found in the vicinity of the airfield include French and Moose creeks.

3.1.3.3 Piledriver and Garrison sloughs are the two largest streams in the vicinity of the airfield. Piledriver Slough, which discharges into the Tanana River, is located along the western edge of Eielson and approximately 4,000 feet west of the airfield and parallel to the runways. Approximately 12 miles of Piledriver Slough occurs on Eielson. The slough receives no runoff from the urban developed area of the base and has good water quality. Garrison Slough has, as the main water body that runs through the industrial portion of the base, received some alteration due to base development. It has been channelized in some areas, and has multiple stream crossings. Water quality in Garrison Slough is good, but in the portion of the slough that runs through the industrial area of the base, instream habitat is not high quality due to alterations that have occurred and lack of riparian and aquatic vegetation. In addition Polychlorinated Biphenyls (PCBs) have been found in the sediments of Garrison Slough, but the levels are below the maximum levels allowed in waters classified as industrial and thus meet all applicable state and federal water quality standards.

3.1.4 Wetlands

Wetlands are a predominant physical feature of Eielson lands. For the most part, the developed portion of the base, and the elevated hills to the east, are classified as uplands. However, some portions of the developed area of the base, as well as major portions of the undeveloped areas, are designated 404 wetlands by the Corps of Engineers. Based on current delineation figures for wetlands on Eielson, 79 percent of the undeveloped portion of the base are wetlands. This includes 10,197 acres of vegetated wetlands and 723 acres of lakes, ponds, and streams. The area encompassed by the Proposed Project and Alternative 1 do not contain wetlands.

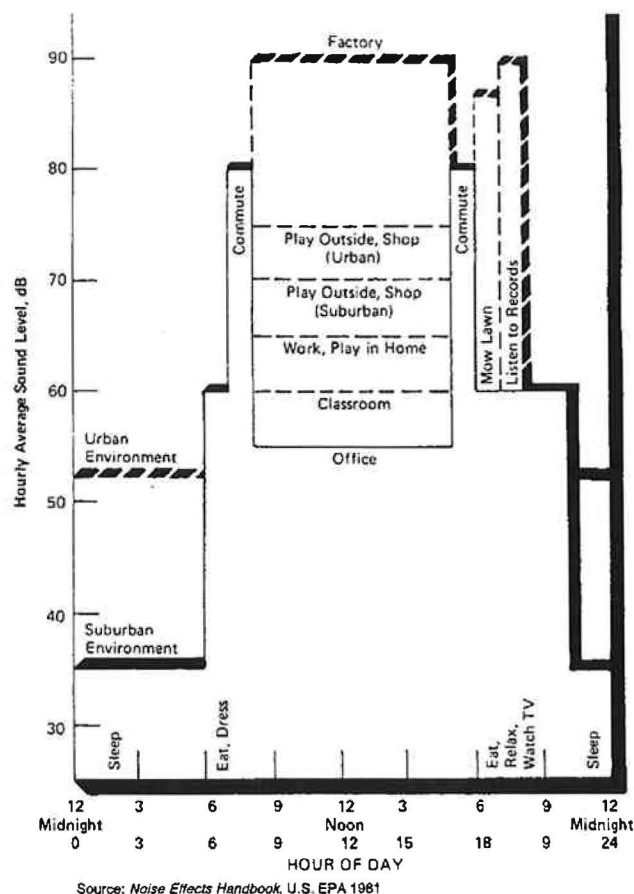


Figure 3-1 - Noise Levels

3.1.5 Noise

Aircraft generate by far the most noise on Eielson. Noise levels associated with aircraft during flying hours can exceed 80 decibels (dB) in the vicinity of the flight line, however, the decibel level drops off to a maximum of 70-dB in Moose Creek, the closest off base residential area. A 65-dB level or higher is not recommended for housing areas by EPA standards (Noise Effects Handbook, US EPA, 1981). Construction noise is potentially

another source of noise, but it is not considered to be a concern due to its temporary nature and relatively low dB level. **Figure 3-1** is a chart that provides a scale of noise levels associated with typical daily activities.

3.1.6 Air Quality

Air quality is generally good at Eielson. Although portions of the North Star Borough, of which Eielson is also a part, are in non-attainment for carbon monoxide (Fairbanks and North Pole), Eielson is far enough south to not be included or affected. The Clean Air Act designates areas as *attainment*, *non-attainment*, *maintenance*, or *unclassified* with respect to national ambient air quality standards (NAAQS). Non-attainment and maintenance areas are locales that have recently violated one or more of the NAAQS and must satisfy the requirements of State or Federal Implementation Plans (SIPs or FIPs) to bring them back into conformity with the applicable air quality standards. Eielson is located in an *unclassified* area, therefore activities that generate emissions do not need to satisfy the requirements of the EPA ruling *Determining Conformity of General Federal Actions to the State or Federal Implementation Plans*.

3.1.7 Cultural Resources

In 1994, Eielson contracted for the preparation of a predictive model for the discovery of prehistoric cultural resources on base lands. The predictive model was then used to conduct an evaluation of cultural resources on Eielson as required by Section 110 of the National Historic Preservation Act. The areas associated with the proposed action and alternative 1 has been determined to not contain cultural or archeological resources. In the event that during project excavation/construction any cultural resources were encountered, activities would cease until the resources were evaluated.

3.2 Biological Resources

3.2.1 Vegetation

3.2.1.1 The vegetation of the Tanana River Valley in the vicinity of Eielson is typical of boreal forest or taiga habitats. The boreal forests of Eielson are predominantly evergreen forests dominated by black spruce and white spruce (*Picea glauca*), but also include extensive stands of deciduous forests containing paper birch (*Betula papyrifera*), quaking aspen (*Populus tremuloides*), and balsam poplar (*Populus balsamifera*). Extensive areas of shrub and herbaceous vegetation are found in wetlands, lowland areas, and the active floodplain, and are dominated by willows and other shrubs, sedges, and grasses. Bog areas are dominated by black spruce stands intermixed with peat moss (*Sphagnum*) and cottongrass (*Eriophorum vaginatum*).

3.2.1.2 In the immediate vicinity of the proposed project, the area is a combination of wooded (birch, white spruce and aspen) and cleared grassy areas.

3.2.2 Aquatic/Fishery Resources

3.2.2.1 Lakes and streams on Eielson contain both native fish and fish stocked by the Alaska Department of Fish and Game. Native fish found in the Tanana River drainage include chinook salmon (*Oncorhynchus tshawytscha*), chum salmon (*Oncorhynchus keta*), silver salmon (*Oncorhynchus kisutch*), burbot (*Lota lota*), arctic grayling (*Thymallus arcticus*), northern pike (*Esox lucius*), chub (*Semotilus* sp.), several species of whitefish (*Coregonus* spp.), sheefish (*Stenodus leucichthys nelma*), rainbow trout (*Oncorhynchus mykiss*), and arctic char (*Salvelinus alpinus*).

3.2.2.2 There are no aquatic resources in the vicinity of the proposed project area or alternative 1.

3.2.3 Wildlife Resources

3.2.3.1 The surrounding Tanana Valley provides breeding habitat for a wide variety of migratory bird species. Bird species found on Eielson include spruce grouse (*Dendragapus canadensis*), ruffed grouse (*Bonasa umbellus*), northern goshawk (*Accipiter gentilis*), sharp-shinned hawk (*Accipiter striatus*), great horned owl (*Bubo virginianus*), red-tailed hawk (*Buteo jamaicensis*), and American kestrel (*Falco sparverius*). During winter, willow ptarmigan (*Lagopus lagopus*) and rock ptarmigan (*Lagopus mutus*) are common on Eielson. Over 20 species of waterfowl, including geese, ducks, loons, grebes, and scoters use aquatic habitats on the installation.

3.2.3.2 There are 32 species of mammals found on Eielson, and most of them could potentially occur in the project area. Common species include moose (*Alces alces*), black bear (*Ursus americanus*), grizzly bear (*Ursus arctos*), snowshoe hare (*Lepus americanus*), marten (*Martes americana*), red squirrel (*Tamiasciurus hudsonicus*), beaver (*Castor canadensis*), muskrat (*Ondatra zibethicus*), mink (*Mustela vison*), meadow vole (*Microtus pennsylvanicus*), red-back vole (*Clethrionomys rutilus*), and meadow jumping mice (*Zapus hudsonius*).

3.2.4 Project Area Habitat Value

Habitat associated with the project area has been previously impacted by placement of gravel fill and clearing of timber. Alternative 1 has also received impacts from previous activities associated with road and other facility construction.

3.2.5 Threatened and Endangered Species

No threatened or endangered species, as designated by the US Fish and Wildlife Service, typically occur in any of the project areas included in the listed alternatives. This was the conclusion of an Eielson contract study entitled *Biological Survey, Final Report 1994*, that addressed the potential for the presence of endangered species on base lands.

4.0 Environmental Consequences

This section discusses the probable impacts for each alternative described in Section 2.0. This section is organized according to resources and a discussion of each alternative action is provided relative to resources identified as relevant in Section 3.0.

4.1 Physical Environment

4.1.1 Soils

4.1.1.1 *Proposed Action:* The proposed action would result in some disturbance to soils. The clearing of the project site of trees and shrub vegetation and the preparation of foundations for buildings and roadbeds for pavement would all require some soil excavation and backfilling with classified material. Gravel required for construction would be obtained from nearby Cathers Lake Gravel pit.

4.1.1.2 *Alternative 1:* Construction of this alternative would have minimal impacts on soils. No vegetation would need to be removed. Minor soil excavation would occur in conjunction with preparation of building foundations and roadbed construction.

4.1.1.3 *No Action Alternative:* There would be no impact to soils from this alternative.

4.1.2 Groundwater

No impacts to groundwater would likely occur from any of the alternatives proposed in this EA.

4.1.3 Surface Water

No impacts to surface water would likely occur from any of the alternatives proposed in this EA. The closest surface water is a man-made lake across a large grass field approximately 150 meters away.

4.1.4 Wetlands

There are no wetlands in the project area and it is unlikely that any impacts to wetlands would occur as a result of any of the alternative actions. The closest wetlands are associated with a man-made lake nearby.

4.1.5 Noise

Noise impacts associated with both of the action alternatives would be short-term and relatively low decibel compared to ambient noise levels that occur with flight line aircraft operations. Noise would be associated with construction machinery, and would last only for a short period during the construction of the gate facility.

4.1.6 Air Quality

Some minor, short-term impacts from emissions associated with the operation of construction machinery would result from the proposed action and alternative 1.

4.1.7 Cultural Resources

No impacts to cultural resources would result from any identified alternatives. In the event cultural or historic resources were uncovered during project excavation, all work would cease until a professional archeologist was brought to the site to evaluate the find.

4.2 Biological Resources

4.2.1 Vegetation

4.2.1.1 Proposed Action: Some minor impacts to vegetation will occur as a result of construction of the new gate facility at the proposed location. These impacts will be in the form of vegetation removal (trees and shrubs). Approximately 0.5 acres of wooded area will be impacted.

4.2.1.2 Alternative 1: This alternative would result in few impacts to vegetation.

4.2.1.3 No Action Alternative: No impacts to vegetation would result from this alternative.

4.2.2 Aquatic/Fishery Resources

No impacts to aquatic/fishery resources will occur from any of the stated alternatives in this EA.

4.2.3 Wildlife Resources

Minor impacts to small mammals could eventually occur from the placement of fill in conjunction with construction under both the proposed action and alternative 1.

4.2.4 Threatened and Endangered Species

No impacts to threatened and endangered species will result from any of the alternatives considered in this EA.

4.3 Cumulative Impacts

The National Environmental Policy Act (NEPA) process requires that the issue of cumulative impacts be addressed in an EA.

4.3.1 The Council on Environmental Quality (CEQ) has stated in their NEPA regulations (1508.7) that: "*Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to past, present, and reasonably foreseeable future actions. . .*" and "*. . . can result from individually minor, but collectively significant actions taking place over a period of time.*" Eielson, particularly in recent years, has been very cognizant of the issue of cumulative impacts and has worked hard to minimize impacts associated with individual projects so that cumulatively significant impacts do not occur. Part of this effort has been through habitat restoration and enhancement associated with reclaiming inactive gravel pits.

4.3.2 Habitat losses associated with the proposed project are very minor, approximately 0.5 acres of woodland habitat. This type of habitat is very common on Eielson base lands. Of the 19,790 acres of base lands, more than 50 per cent are woodlands. Loss of 0.5 acres will not result in significant cumulative impacts.

4.4 Unavoidable Adverse Impacts

4.4.1 *Proposed Action:* The proposed action would result in the direct loss of 0.5 acres of wooded area.

4.4.2 *Alternative 1:* This alternative would not result in any unavoidable adverse impacts.

4.4.3 *No Action Alternative:* No unavoidable adverse impacts would result from this alternative.

4.5 Relationship of Short-Term Uses and Long-Term Productivity

The proposed action and alternative 1 would result in some minor long-term losses of productivity. In both cases, the long-term use of this land would result in a more efficient and safer main gate complex.

4.6 Irreversible and Irretrievable Commitments of Resources

No irreversible or irretrievable commitments of resources would result from the proposed action or alternative 1.

4.7 Environmental Justice

4.7.1 President Clinton issued Executive Order (EO) 12898, *Environmental Justice in Minority Populations and Low-Income Populations*, on February 11, 1994. Objectives of the EO, as it pertains to the NEPA process, requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. To accomplish these requirements the Air Force must conduct an

environmental justice analysis of all potential impacts that may result from the proposed actions.

4.7.2 The environmental justice analysis must first identify all adverse impacts associated with the project. The next phase is to delineate the potential area of impact for the resources affected. If, within this area of impact, population demographics are such that a disproportionate effect on minority or low-income populations may occur, it should be so identified. These impacts should be documented and mitigation should be developed that can be implemented by the Air Force.

4.7.3 The site for the proposed project is located on federal lands designated for military operations. It is an area that is restricted to military activities only, with limited public access permitted. The closest residential area to this site is Eielson AFB military housing, 1.5 miles away. The closest off base housing is Moose Creek, approximately 0.75 miles away. Both of these residential areas reflect a broad cross section of middle and low-income populations, and their proximity to the project area would not result in any disproportionate impacts on minority or low-income populations if this project were constructed.

4.8 Mitigation

No mitigation is proposed or required as a result of federal and state permits obtained for this project.

5.0 List of Preparers, Persons, and Agencies Consulted

5.1 Preparer

Sarah Conn, Alaska Caledonia-Environmental Services, Ester, AK, ph: 474-8234.

5.2 Persons and Agencies Consulted

Mr. Jeff Putnam, Chief of Contract Engineering, 354 CES/CEC, Eielson AFB, AK
ph: 377-5159.

Mr. Tim Woster, Engineering Manager, Alaska DOT & PF, Fairbanks, AK, ph 451-5106.

6.0 Glossary

Alluvial - Sediment deposited by flowing water.

Aquifer – An underground layer of porous rock, sand etc., that containing water, into which wells can be sunk.

Cantonment - The main operational area of a military base.

Culvert - A drain crossing under a road or an embankment.

Environmental Impact Analysis Process (EIAP) - A set of guidelines (Air Force Instruction 32-7061) that the Air Force uses to comply with the NEPA process.

Decibel - A unit of measurement for describing sound intensity.

Habitat - The area or environment in which an organism or ecological community normally occurs.

Mean Sea Level (MSL) - The average surface level for all stages of the tide over a 19-year period, usually determined from hourly height readings from a fixed reference point.

National Environmental Policy Act (NEPA) - Legislation enacted in 1969 mandating that all federal agencies assess the environmental impacts of actions which may have an impact on man's environment.

National Historic Preservation Act - Federal mandate that requires the preservation of prehistoric and historic sites.

Non-Attainment Area - An area exceeding National Ambient Air Quality Standards for one or more criteria pollutants.

Permafrost - Permanently frozen subsoil occurring in perennially frigid areas.

SAFO 780-1 - Secretary of the Air Force Order and reference number.

Upland - An area of land of higher elevation, often used as the opposite of a wetland.

Wetlands - Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

404 Wetland - Wetland areas that have been determined "waters of the United States" and thus subject to Section 404 wetland permitting guidelines administered by the Army Corps of Engineers and the Environmental Protection Agency.

100-Year Floodplain - Based on historical evidence, there is a high probability that the area within the 100-year floodplain will be flooded once every 100 years.

7.0 Public Notice

USAF ANNOUNCES an ENVIRONMENTAL ASSESSMENT

In accordance with the National Environmental Policy Act (NEPA), and Air Force Regulations, Eielson Air Force Base has completed a Draft environmental assessment (EA) and Finding of No Significant Impact (FONSI) to evaluate the consequences of the following stated proposed action:

construct a new main gate complex on the Old Richardson Highway, approximately 500 feet north of the existing main gate facility. The new facility will include a new visitors center, new parking areas, and new drop arm gate.

PUBLIC COMMENT WELCOME

To review the draft EA and FONSI, copies are available at the Noel Wien Library in Fairbanks. The public is invited to review these documents and make comments during the 15-day comment period from now until April 23, 2004. To get a copy of the EA, to comment, or for more information contact Maj. Valerie Trefts, 354 FW/Public Affairs, at (907) 377-2116, 354th Broadway Street, Suite 15A, Eielson AFB, AK 99702-1830.